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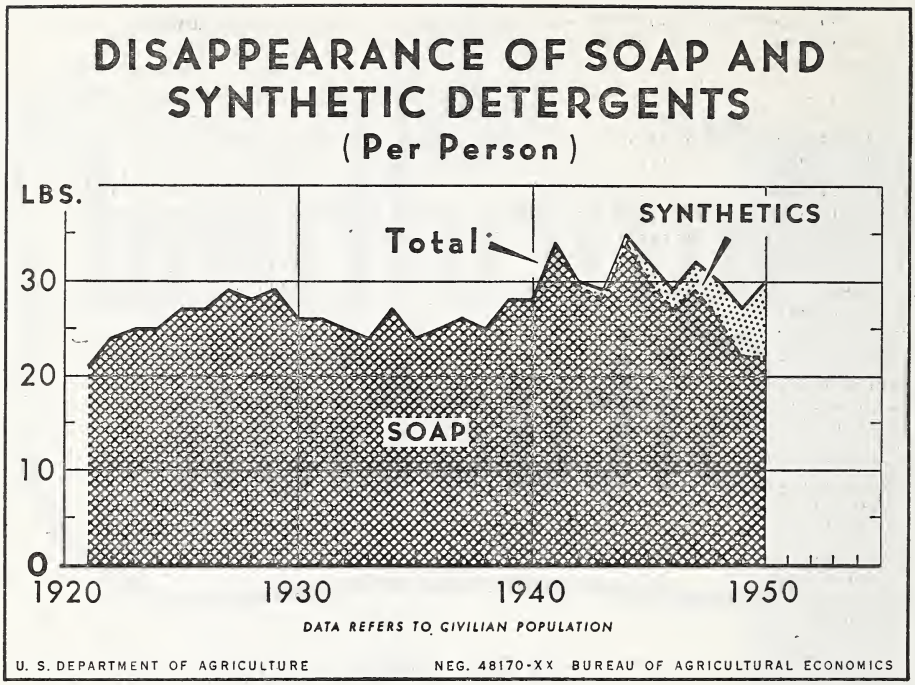

More Detergents, Less Soap Affect Fats and Oils Trade

USE OF SOAP and synthetic detergents in the postwar period has been greater than before the war. Consumption of these items, on a product-weight basis averaged over 29 pounds per civilian in 1946–50 compared with 26 pounds in 1935–39. Consumption in 1950 was higher than in any year prior to 1941. Use tends to increase when income and industrial activity are high and to decrease when they are low.

Soap Use Drops

Although total use of these products has been at a high level in recent years, an important change has taken place in the composition of the total. A sharp drop in soap has been offset by an increase in synthetic detergents. In the last 2 years, consumption of soap per civilian averaged 22 pounds, less than in any other year since 1921. Sales of synthetic detergents, on the other hand, have increased from less than 1 pound per capita in 1942 to 8 pounds in 1950. Retail sales of synthetic detergents, on a product-weight basis, in 1950, are estimated to have been about 25 percent of the total production of soap and synthetics, compared with less than 10 percent in 1947.

Better for Hard Water

One of the principal reasons for the rapid growth in sales of synthetic detergents is their solubility in hard water. Soaps are not, and as a consequence, their cleaning power is reduced and a scum (ring around the bath tub) is produced. A substantial percent of the population of the United States lives in areas in which the water is hard. Although some synthetics are made from fats and oils, most of them are made from petroleum and coal-tar derivatives. The availability

of a constant and dependable supply of these nonfat raw materials, at a comparatively low cost, encouraged the development of synthetics particularly during World War II.

Substantial changes have occurred in the relative importance of different types of soap. Such changes affect the total use of fats and oils to some extent as the fat content differs for the various items. The synthetics compete most closely with the granulated, powdered and sprayed, and the chipped and flaked soaps. It is production of these soaps which has shown an upward trend, while production of bar laundry soap has declined fairly rapidly. This shift is believed to reflect mainly the growing importance of home washing machines, although use of the granulated and flaked soaps and detergents for dish washing and other household work also has increased. Production of toilet soap and of total general purpose items each has increased fairly steadily.

Synthetics to Increase

Retail sales of synthetic detergents are estimated at 1,200 million pounds in 1950, one-fourth of the total for soap and synthetic detergents in that year. Trade sources indicate that in 1950 synthetics represented 31 percent of total nonliquid soap and detergent sales to housewives and 51 percent of package (nonbar) soap and detergent sales. If raw materials were available, it is felt that sales of synthetics might increase to 75 percent of package sales within the next 2 years. However, temporary shortages of plants and raw materials will prevent such an expansion in that time. Trade sources believe that total sales of 2 billion pounds can be expected in the next couple of years if plant and material shortages are alleviated. Demand for raw materials used in synthetic detergents, such as benzene and sulphuric acid, has increased in recent months, but steps are being taken to increase production and conserve supplies to meet essential needs. If available supplies of these raw materials permit a substantial increase in synthetic detergents, soap production will be further reduced.

Synthetics made from fats and oils (most are made from nonfat products) have a relatively low fat content. When fat is converted to a synthetic, it has about 3½ times as much detergent power as the same fat would have if it were converted to soap. In 1950, use of fats and oils in synthetic detergents represented 5 percent of total fats and oils used in both soap and synthetic detergents, while retail sales of synthetic detergents, on a product-weight basis are estimated to have been about 25 percent of the total production of soap and synthetics.

The major raw materials used in soap are inedible tallow and greases and coconut oil. In 1950, these fats and oils comprised 84 percent of the total. Use of inedible tallow and grease as a percent of all materials used in soap has increased sharply compared with prewar, totaling 71 percent in the last 2 years compared with 49 percent in 1937–41.

This percentage increase reflected low prices for tallow and greases and relatively high prices for palm and coconut oils. Prices of inedible tallow and greases declined sharply beginning in early 1948. During about half of 1949 and for several months in 1950, prior to the outbreak of fighting in Korea, tallow and grease were selling below their prewar average. No other major fat or oil, except olive oil, had declined to this extent.

Production Exceeds Consumption

Low prices for inedible tallow and greases reflect the fact that from the end of World War II up to the outbreak of hostilities in Korea, domestic consumption of inedible tallow and greases did not keep pace with production of these fats. Production in 1947–49 was 74 percent more than the 1937–41 average, while consumption in the same period increased 52 percent. This disparity increased in the first 6 months of 1950.

The decline in the ratio of consumption to production of inedible tallow and greases was due largely to the fact that production of soap did not keep pace with output of these fats. Total raw materials used in soap in 1947–49 was only 10 percent more than the prewar average, while output of inedible tallow and greases increased 74 percent in the same period.

Since the war, the export market has become the largest outlet for inedible tallow and greases aside from the domestic soap industry.

With the change in the international situation resulting from the fighting in Korea, demand for soap fats both for domestic use and for export increased and were accompanied by a tripling in price of tallow and grease. The increased demand for these fats resulted in a reduction in stocks, despite a heavy output. Demand for inedible tallow and greases over the next year or more is expected to remain stronger than in the period before the outbreak of fighting in Korea.

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Soap and the Synthetic Detergents

Year	Materials used in soap [1]	Estimated production of soap	Estimated retail sales of synthetic detergents	Disappearance, civilian			
				Total	Per capita		
					Total	Soap	Synthetic detergents
	Million pounds	*Million pounds*	*Million pounds*	*Million pounds*	*Pounds*	*Pounds*	*Pounds*
Average:							
1921–24	1,268	2,750	----------	2,652	24	----------	----------
1925–29	1,664	3,420	----------	3,325	28	----------	----------
1930–34	1,670	3,260	----------	3,196	25	----------	----------
1935–39	1,769	3,360	[2] 10	3,310	26	26	[3]
1940	1,972	3,700	30	3,668	28	28	[3]
1941	2,438	4,600	40	4,511	34	34	[3]
1942	2,160	4,100	60	3,973	30	30	[3]
1943	2,116	4,100	80	3,757	29	28	1
1944	2,526	----------	100	4,560	35	34	1
1945	2,272	4,500	200	4,080	31	30	1
1946	1,957	3,900	300	3,964	28	26	2
1947	2,443	4,400	400	4,573	32	29	3
1948	2,293	4,000	600	4,422	30	26	4
1949	1,887	3,400	800	4,032	27	22	5
1950 [4]	1,929.	3,500	1,200	4,524	30	22	8

[1] Fats, oils, rosin and tall oil. [2] 1936–39. [3] Less than one-half pound. [4] Preliminary.

Outlook Highlights . . . JULY 1951

Larger Beef Output Ahead

Increases in meat production may be greater for beef than pork the rest of this year and next. A larger output of beef is expected the second half of this year and a continued rise is likely next year.

Milk Prices to Rise Seasonally

Milk production has passed its annual peak and will decline seasonally during the rest of this year. With production declining and demand continuing strong, or rising, farmers' average prices for milk will advance in the coming months.

Egg Output Declining

The outlook is for continued seasonal price increases for eggs. Production is declining and storage stocks are unusually low.

Chicken prices in early June were lower than a month earlier. The explanation is found in seasonally increasing marketings of both young and mature chickens from farm flocks, and large broiler marketings from the record earlier placements.

Steadier Prices for Wheat

Wheat prices probably will not fall materially below loan levels as they have in some past years. Even though prices may be expected to weaken fol-

(*Continued on page 14*)

More Farmers Using "LP" Gas

. . . for cooking, tractors, other purposes

FARMERS ARE cooking with gas. Not only are they cooking with it, but they are using it for heating their homes, pumping irrigation water, running their tractors, brooding their chicks and doing numerous other jobs. Liquefied petroleum gases (better known as "LP" gas) are the means by which these things are accomplished. Variously known in different parts of the country as bottled gas, by company trade names or by their correct names of propane and butane, the gases are delivered to the consumer in a liquefied form under pressure in tank trucks or in cylinders. If delivered by tank truck the liquefied gas is pumped into the users' storage tanks, while the cylinders are substituted for emptied ones.

Used by Fourth of Farmers

A mere turn of a valve now brings to almost a quarter of the American farmers the same kind of quick, sure, clean gas heat long enjoyed by urban dwellers. Reports to the Bureau of Agricultural Economics by 24,000 voluntary crop reporters in February 1950 revealed that liquefied petroleum gas was used for some purpose on 23 percent of the farms in 1949. Farmers used more than a half billion gallons or about 18 percent of the total sales of 2.8 billion gallons. A year later, with total sales climbing to 3.6 billion gallons, it is probable that consumption by farmers rose to around 650 million gallons, and the proportion of farmers using it last year may have exceeded the 25 percent mark.

The use of "LP" gases is of comparatively recent development, with total sales of only 18 million gallons reported in 1930. By 1945 sales had reached almost 1.3 billions, with the increase since then at the rate of a half billion gallons per year.

With some 4,500 bulk stations to serve them, almost all American farmers are within service distance of such stations. The reports indicated that about one-tenth of the farmers in the Southeast used "LP" gases in 1949; about a fifth in the Northeastern States; about a quarter in the Corn Belt, Lake, Delta, Mountain, and Pacific States. Over a third of the farms in the Plains States were users. And in Oklahoma and Texas, the percentage of farm users was 43 percent.

For the country, as a whole, about three-fourths of the "LP" gas consumed on farms was used in farm households in 1949, with the other quarter being used for other farm activities. The Pacific States—with more than two-fifths of total consumption being used outside the farm household—made the greatest use of "LP" gas for production purposes. The Pacific States used the largest quantities per farm as well—over 1,000 gallons per farm.

"LP" gases first gained popularity as a cooking fuel, but they are also widely used for heating water and, in areas not reached by electric power lines, for refrigeration. It has become an important heating fuel in areas where the price compares favorably with fuel oil.

Popularity Growing

"LP" gas is becoming increasingly popular on the farm for nonhousehold uses. It is used extensively in the West and Southwest as fuel for large stationary engines, particularly in pumping irrigation water. It is used for dehydrating crops.

Some of the manufacturers are now selling tractors equipped to burn "LP" gas. Prices of these new tractors are slightly above those equipped to burn the usual fuels. While little or no cheaper than other fuels, it has been suggested in some quarters that the cool burning "LP" gas makes for longer engine life. Conversion units are on the market to adapt most makes of tractors for use of "LP" gas.

This fuel is becoming of increasing importance for brooding chickens. Domestic sale of gas brooders rose from about 24,000 in 1945 to more than 90,000 in 1949. In areas where "LP" gas is used in relatively small quantities and

is delivered in cylinders, it is usually sold by the pound or is metered as it is used.

More than half of the farmers using "LP" gas bought it by the pound or metered, but their purchases accounted for only about one-sixth of the "LP" gas used on farms in 1949. In areas of heavy farm consumption most of the "LP" gas is bought by the gallon, delivered to the farm by tank trucks, and stored in tanks owned by the farmer.

Prices paid by farmers vary widely, depending on the method of delivery and the distance from point of manufacture. In 1949 the price when sold by the pound was three times as high as the average price where sold by the gallon when computed on the same basis. The average cost for all purchases was 15.8 cents per gallon. The average by areas ranged from 41.1 cents per gallon in the Northeast to 9.7 cents per gallon in Oklahoma-Texas, which is the center of production as well as the area of heaviest farm consumption.

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Liquified Petroleum Gases Used on Farms, 1949[1]

State group	Farms using	Farm consumption		Percentage used in—		Cost per gallon[2]
		Per farm using	Total	Farm household	All other farm uses	
	Percent	*Gallons*	*Million gallons*	*Percent*	*Percent*	*Cents*
Northeast	19	128	10.9	85	15	41.1
Corn Belt	27	179	47.8	90	10	25.1
Lake States	28	129	18.0	90	10	33.0
Great Plains	37	469	64.9	89	11	15.4
Appalachian	9	206	18.2	83	17	25.9
Southeast	10	329	20.0	79	21	18.7
Delta	23	433	55.8	89	11	12.9
Oklahoma-Texas	43	821	169.2	68	32	9.7
Mountain	25	681	33.7	77	23	15.4
Pacific	25	1,042	70.0	58	42	15.8
United States	23	413	508.5	75	25	15.8

[1] Based on returns from 24,000 voluntary crop reporters in February 1950. The data were stratified by six sizes of farm groups and weighted by number of farms in each group to obtain the averages shown. About 6,000 respondents reported using liquefied petroleum gases.

[2] In computing this figure 4.5 pounds was used as the equivalent of 1 gallon.

Trends in Planting and Fertilizing Corn

CORN IS OUR leading crop. It ranks first in acreage, first in value, and more farmers raise it than any other crop. Corn is grown in every State but its importance varies widely in the various States as well as on different farms of the same locality.

Although the growing of corn is widespread there are wide differences in planting methods, in the quantity of seed planted per acre, spacings between rows, and in quantity of fertilizer used per acre. These differences are shown in a recent report of the BAE, F. M. 84, Planting and Fertilizing Corn. The material for this report was supplied in February 1949 by that group of farmers who constitute the voluntary crop correspondents of the Department of Agriculture.

These farmers reported the acres of their corn that were (1) planted checked rows, (2) planted in lister furrows, and (3) planted by all other methods. All of the corn planted by "all other methods" is planted with drill-type planters and most of it is surface planted but it includes also acreages of corn planted on ridges as well as the considerable acreage planted in shallow furrows.

Check-Rowing Declines

When corn is check-rowed the spacing between plants in the row is uniform and the distance between plants is about the same as the distance between corn rows. At the turn of the twentieth century it was said that more corn was check-rowed than was planted by any other method. In 1948 only 28 percent of the corn was check-rowed. Some corn was check-rowed in every State but this method of planting accounted for more than half of the acreage in but three States—Iowa, Illinois, and Minnesota. Check-rowed corn can be cross-cultivated and weed control is easier than with other methods of surface planting. It is best adapted to the large level fields of the humid areas, especially the central and western Corn Belt.

About one-eighth of the 1948 corn crop was planted in lister furrows. With this method the corn is planted in deep furrows, the bottom of which is 10 or more inches below the top of the ridge. Planting corn in lister furrows is most important in the Central and Southern Plains. But little corn was planted in lister furrows east of the Mississippi River or in other humid areas where the heavy rainfall might flood the furrows and damage the young plants. Much of the corn planted in lister furrows is grown in level fields. With this method of planting weed control by cultivation is less of a problem than with any other method of planting corn. Planting in deep furrows permits the development of a deep root system. This enables the plant to withstand drought and storm damage.

60 Percent by Other Methods

Planting corn by methods other than check rowing and planting in lister furrows accounted for about 60 percent of the total corn acreage of 1948; and these other methods accounted for about half of the acreage of the Corn Belt and more than 90 percent of the acreage of the Northeast, Appalachian, Southeast, the Delta, and the Pacific Coast States.

The quantity of seed used per acre for planting and replanting corn varies in the different States and is influenced principally by the purpose for which the crop is planted, the distance between corn rows, and the spacing of plants in the row. The survey showed that 7½ pounds of seed were used per acre for the country as a whole. The planting rate was highest in the Northeast, in the Lake and the Pacific Coast States. In these States a relatively high percentage of the crop was used for silage. In most States where the seed used per acre was above average the width between rows was below average. In most southern States the seed planted per acre is below and the spacing between corn rows more than

the United States average. In the Corn Belt the rate of planting and the distance between rows was about the same as the national average.

Row Widths

For the entire country more than 70 percent of the crop was planted in row widths from 39 to 42 inches. Little corn in the major producing States was planted in rows more than 48 inches apart. Closely spaced corn rows were reported in the New England States and in New York, and in most Mountain and Pacific Coast States. Widely spaced rows were most common in the South where in many areas much of the corn is interplanted with other crops.

During the past decade United States farmers have materially increased their use of commercial fertilizer. Total farm consumption of all kinds of commercial fertilizers including raw rock phosphate, basic slag, and agricultural gypsum was estimated at 17,228,000 tons in 1948. From 1938 to 1948 there was an increase of about 125 percent in the farm consumption of commercial fertilizer. Fertilizer applications for the corn crop averaged 38 pounds per planted acre in 1938 and 103 pounds in 1948. This was an increase of about 170 percent. About half of the total field-corn acreage received one or more applications of commercial fertilizer. Fertilizer used on corn in the past decade has increased in all parts of the country but the percentage increase has been most pronounced in the western half of the country. Individual growers throughout the country use applications ranging from as little as 75 pounds to as much as a ton per acre.

Big Increase in Fertilizer

Applications of fertilizer per acre continue to be large in North Carolina, Virginia, and in most Southeastern and Northeastern States. In many of these States about 90 percent or more of the 1948 corn acreage received one or more applications of commercial fertilizer. For the country as a whole around 85 percent of the fertilizer was applied at or before planting time. Almost a third of the fertilizer on corn in the Southeast, the Delta States, and in North Carolina was applied after planting. Most of the fertilizers applied after planting are nitrogen fertilizers.

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1951 Pig Crop 16 Percent Above Average

THE TOTAL 1951 pig crop (spring and fall) is expected to be about 106 million head, the second largest on record, 5 percent above last year and 16 percent above average.

The spring pig crop is estimated at about 64 million head, seven percent larger than the 1950 spring crop and 15 percent larger than average. More sows farrowed this spring than last, and more pigs were saved per litter. The crop this spring was exceeded only in 1943.

Spring pig numbers are as large or larger than last year in all regions. Western States are up 11 percent; North Atlantic, up 9 percent; West North Central, up 8 percent; South Atlantic, up 7 percent; East North Central, up 6 percent; South Central, same as last year.

The number of fall pigs is estimated to total about 42 million head. This would be 3 percent larger than the fall crop last year and the third largest on record. Size of the fall crop is based on breeding intentions reported by farmers June 1. About 6.4 million sows are reported to farrow this fall, and total pigs saved—based on 10-year average with an allowance for upward trend in pigs saved per litter—would bring the fall crop to about 42 million head. All regions except the South Central show increases in the number of sows for fall farrow.

The number of hogs 6 months old and over on farms and ranches June 1—including brood sows—was nearly 25.5 million head, close to 2 million head more than on June 1 a year ago.

In net returns from feeding

Ensiled Alfalfa Is Ahead

OF FOUR METHODS used in harvesting alfalfa for fattening steers in Colorado, the largest net returns per acre, in terms of beef and dollars, is from ensiling—considerably more than chopping from the windrow, about a fourth more than baling from the windrow, and almost double that of stacking with buckrakes or sweep stackers.

A study of the several methods used in harvesting shows that stacking alfalfa required the least investment in equipment but required more labor than chopping or baling from the windrows. And because of higher hauling and feeding costs, stacking was a more expensive method of harvesting and feeding. Steers fed the stacked alfalfa made the least gains and the lowest net returns of the four methods studied.

To find the relative costs and net returns, the results of 3-years' winter fattening experiments of steers at Colorado A. & M. College were combined with farmers' costs of harvesting and feeding alfalfa in that State. Harvesting methods used—both in the feeding experiments and on farms—were stacking with buckrakes, chopping from the windrow, baling from the windrow, and ensiling.

Many Factors to Consider

Ensiling of alfalfa is relatively new in Colorado. Most farmers there prefer to use a field chopper equipped with a sickle bar, and haul the fresh cut alfalfa to the silo. This system of harvesting saves mowing and raking operations, and reduces to a minimum the losses from shattering.

Farmers who stacked their alfalfa had the least investment in haying equipment. As the investment increased less labor was required to harvest and feed, with the exception of ensiled alfalfa. The heavier, higher water content of the ensiled crop required more labor to harvest an acre.

The lowest cost of harvesting 1 acre was for stacked alfalfa. But in this work the additional costs of hauling and feeding were included and stacking became one of the more expensive methods. Costs of harvesting, hauling, and feeding one cutting of alfalfa from 1 acre were lowest for chopping from the windrow, with baling from the windrow next to the lowest, followed by stacking, with ensiling having the highest cost.

In these feeding experiments 177 to 187 pounds of sun-cured alfalfa were eaten, along with the grain ration, to produce 100 pounds of gain. But with alfalfa ensilage—a roughage containing a high percentage of moisture—479 pounds were eaten for each 100 pounds of gain. In these feeding experiments one cutting from 1 acre produced 80 percent more beef per acre when the alfalfa was ensiled, and 10 percent more beef per acre when the alfalfa was chopped or baled from the windrow, than when it was stacked.

Costs, Only Part of Story

Ensiled alfalfa was higher in carotene content than the sun-cured alfalfa. Though the high carotene content of ensiled alfalfa was not reflected in the gains of these steer-fattening experiments, it would likely show advantages with breeding stock and dairy cows.

Stacked alfalfa fed per 100 pounds of steer gain showed a harvesting and feeding cost of $1.06. Comparable harvesting and feeding costs per hundredweight of steer gain were 58 cents if chopped, 76 cents if baled, and $1.25 if ensiled.

The amount of grain fed per hundredweight of gain varied only a little among the different lots of steers. On this basis, steers fed alfalfa chopped from the windrow ate the least grain. Next were those fed alfalfa baled from the windrow, then those fed stacked alfalfa. Steers fed ensiled alfalfa ate the most grain per hundredweight of gain. Of more significance is the fact that ensilage-fed steers made efficient use of a lot more grain than the other

steers. The total amounts of grain fed with the alfalfa from one cutting from 1 acre was:

7,319 pounds with stacked alfalfa, 7,843 pounds with chopped alfalfa, 7,778 pounds with baled alfalfa, 12,680 pounds with ensiled alfalfa.

Net the Key Figure

The total costs per hundredweight of gain are interesting and important. But *more significant is the comparative end results in terms of total net returns* from the feeding operations. On a per acre basis, these ranged from $56.10 for the stack-fed alfalfa to $96.42 for the ensilage.

Average selling prices for the steers in the feeding experiments were highest for those fed alfalfa chopped from the windrow ($28.50 per hundred) and lowest for steers fed stacked alfalfa ($28.09). The differences in prices are attributed to differences in grades at selling time. At the start of the feeding period the steers were selected and sorted for uniformity among the different lots.

Less Labor for Chopping

In comparison to steers fed stacked alfalfa, the net returns per hundredweight of steer gain were $1.84 more for steers fed alfalfa chopped from the windrow, $1.05 higher for steers fed baled alfalfa, and 26 cents lower for steers fed ensiled alfalfa.

Chopping alfalfa from the windrow was the least expensive and required the least labor of these four methods. Steers fed chopped alfalfa, however, placed second in terms of gains per acre and net return per acre. Harvesting and feeding ensilage was the most expensive method per 100 pounds of gain but the larger returns per acre in terms of beef and dollars more than justified the higher costs.

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Harvesting and Feeding Alfalfa to Steers

Item	Method of harvest			
	Stack	From the windrow		Ensile
		Chop	Bale	
Yield per acre from 1 cutting, tons [1]	0.90	1.05	1.05	4.40
Cost to harvest and feed 1 acre	$10.83	$6.71	$8.59	$23.06
Pounds of steer gain from 1 acre, fed with grain	1,020	1,150	1,120	1,840
Selling price per hundredweight, 1949–50	$28.09	$28.50	$28.37	$28.24
Net returns per hundredweight of gain	$5.50	$7.34	$6.55	$5.24
Net returns per acre	$56.10	$84.41	$73.36	$96.42

[1] Except for wastes during harvest, yields on a dry-matter basis were the same for each method of harvesting.

Sizing Up Investment Costs For Carolina Dairy Farms

ANY FARMER interested in starting a dairy farm in the South, as well as Southeastern cotton farmers who want to diversify their crops by developing good pastures and adding a dairy herd, may profit by the cost records of dairy farmers in the South Carolina Piedmont. Other cotton farmers already sending a little milk to market from one or two cows may want information which will help them to expand to a larger dairy enterprise.

The South Carolina study was made by Dennis E. Crawford of the South Carolina Agricultural Experiment Station and Charles P. Butler of the Bureau of Agricultural Economics.

It was found that upper Piedmont cotton farms with 2 cows which sold some milk to processing plants had a total investment of only $8,400 per farm. But larger dairy farms, with 20 cows or less, selling grade A milk, had an investment cost of about $23,000. For still larger grade A dairy farms, the investment, of course, continues to increase. Capital required for a 20- to 29-cow farm was $37,000; for a 30- to 39-cow farm, $43,000; and for farms with 40 or more cows, about $57,000. The table gives a breakdown of the investment costs.

Pastures, A Big Item

The records were taken from 13 2-cow cotton farms, selected at random, which sold milk only to processing plants and from 33 commercial dairy farms. The commercial dairies selected for the study had developed intensive grazing systems.

The 2-cow cotton farms averaged 105 acres with 19 acres in permanent pasture and 4 acres in temporary pasture. Farms with 20 cows or less had 185 acres, including 48 acres in permanent pasture and 27 acres in temporary pasture. The 40-cow farms averaged 463 acres with 112 acres in permanent pasture and 90 acres in temporary pasture.

Farmers who change from cotton farming to the production of grade A milk have to make several additions to their capital investment. The capital outlay for improved pastures was no small amount, ranging from $782 for the 2-cow farms to over $5,500 for the 40-cow farms. Lime, seed, labor, and power were the principal cost items in establishing pastures. In addition, fencing ranged from $136 for the 2-cow farms to nearly $1,200 for the 40-cow farms.

Value of buildings ranged from $1,113 to nearly $6,600; machinery and farm equipment, from $1,075 to $6,500. Investment in cows, of course, was another big item, averaging from $350 for the 2-cow farms to nearly $14,000 for the 40-cow farms—probably less than on today's market.

More Equipment for "Grade A"

On the 2-cow cotton farms, which sell milk only to processing plants, only a few items of dairy equipment are needed—only a few pails or milk cans, and a strainer—which add up to about $17. The larger farms, however, which sell grade A milk have to invest $1,061 to $6,500 in a long list of equipment—milk scales, spray guns, milking machines, milk coolers, areators, sterilizers, hot water tanks, hammer mills, ensilage cutters, silo fillers, and other standard items.

Most cotton farms have mule barns which serve useful purposes when dairy cows are added. These barns are used for storage of feeds, and as sleeping quarters for cows. By addition of sheds, they also provide facilities for expansion at low cost. Buildings used for the dairy enterprise on the 2-cow cotton farms were wooden structures and were also used by workstock and other cattle. The barns on the commercial grade A farms met the requirements of the State health department. The size of the milk barns varied with the size of the herd but most barns had at least five stanchions. The newer barns were built of concrete blocks, the older ones of wood.

There were no silos on the 2-cow cotton farms and only 1 of the less-than-20-cow farms reported any; but most farms with 20 or more cows had silos. Many of the older silos were the wooden box type, or a pit or well type, while the newer ones were made of concrete. A few were of metal. Concrete silos (in '48 and '49) with a capacity of 100 to 150 tons ranged in value from $900 to $1,200.

Cotton and Feed Crops Grown

Cotton was grown as a cash crop on all of the 2-cow cotton farms and on 16 of the 33 commercial dairy farms. Acreage in cotton for the 2-cow cotton farms was 16 acres. Farms with 20 cows or less averaged 8 acres in cotton; 20- to 29-cow farms, 20 acres; and the 30- to 39-cow farms averaged 8 acres in cotton. Hay and corn were grown on all the farms and small grains for grain were grown on most of the farms.

Only one of the 5 commercial dairies with less than 20 cows produced silage. Some sorghum as well as lespedeza, kudzu, and grass was cut for silage. Lespedeza was the most common hay produced. Only a few farmers produced alfalfa hay in 1949 but more of them planted alfalfa for the first time that year. All of the farmers who grew alfalfa reported favorable results and planned to continue to produce it. About two-thirds of the farmers grew corn for grain. Less than half of the commercial dairies had grain sorghum but the farms with less than 20 cows planted more grain sorghum than corn.

Temporary winter pastures consisted of small grain and rye grass grown alone or in combination with crimson clover, vetch or red clover. Temporary summer pastures consisted of sudan grass, Johnson grass or Pearl millet. Kudzu provided limited grazing during the summer on a number of farms and lespedeza was used extensively for grazing. Another study dealt with grazing practices and the cost of the more popular pasture crops in the area.

Investments for South Carolina Dairy Farms

Item	Average value per farm, 1949				
	2-cow cotton farms	Commercial grade A dairies			
		Less than 20 cows	20 to 29 cows	30 to 39 cows	40 or more cows
Number of farms	13	5	11	9	8
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Land [1]	4,502	7,946	14,465	14,242	19,905
Improved pastures [2]	782	2,234	3,315	2,968	5,581
Fence	136	570	698	770	1,188
Buildings	1,113	3,197	3,629	6,565	6,103
Dairy equipment	17	1,061	1,622	1,849	2,310
Machinery and equipment	1,075	4,000	6,500	6,500	6,500
Feed supply	90	172	278	468	762
Dairy cattle	350	3,112	5,689	8,612	13,891
Other livestock	354	389	592	585	485
Total	8,419	22,681	36,788	42,559	56,725

[1] Average land values per acre reported in U. S. Census of Agriculture, adjusted by index of land values in South Carolina, computed by B. A. E., were used in estimating investments in land per farm.

[2] Improved pastures represents initial capital outlay for establishing pastures such as lime, seed, labor, and power.

Fewer Accidents Would Save Manpower

THE PRESIDENT of the United States issued a proclamation officially designating July 22–28 as National Farm Safety Week. This year the need for emphasis upon safe practices on farms is greater than ever before. Manpower to meet the requirements for increased outputs of crops and livestock is scarce at best. And if, as happened last year and for a number of years before that, 18,000 farm people die because of accidents and 1,500,000 suffer disabling injuries from the same cause, the reserve of skilled labor available to work on our farms will be still smaller.

Here are the classes of injuries that happen to farm people and the percentage in each class: Falls of persons, 24.7; machines, 12.9; animals, 12.1; motor vehicles, 9.3; handling objects, 8.3; hand tools, 7.8; stepping on or striking objects, 7.5; falling objects, 5.3; burns or shock, 4.2; all other, 7.9.

Are these accidents necessary? Wouldn't just a little more care on the part of the people who live and work on farms prevent many of them? A man isn't likely to fall from a ladder if the ladder is in good repair and properly placed. Your tractor is a potential engine of destruction but it won't hurt you if you keep it running smoothly and use care in operating it. Neither will your horses or mules unless you're careless in handling them. That goes for other livestock too.

The right kind of tool for the repair job you're doing may keep you from getting hurt. Turning off that clogged corn picker before you try to clear it may save you an arm or your life. Keeping your machinery and tools in repair is good insurance.

As for that rake lying in the yard with its prongs pointing upward. Anybody knows better than that. Stepping on the prongs could cause a mean injury.

Nobody likes to see a child hurt, or worse. Keep the children away from animals and from machinery. That's the only safe thing to do. Children are unpredictable. And they move very fast.

Are you a safe driver? Do you know traffic rules and obey traffic signals? Do you stop, look, and listen before driving onto a main highway? Is the view of your driveway entrance blocked by trees and shrubs?

Like to hunt, do you? Pretty careful about your guns, too, I suppose. You can't be too careful. Never point a gun at anyone—loaded or unloaded. Many people have been killed with so-called "unloaded" guns.

What about your home? Are the stairs safe? Or are they cluttered with toy rolling stock and that pile of old magazines you're going to take to one of the neighbors when you get around to it? Mighty easy to trip over something on stairs and not so easy to keep from falling when you do.

Just waxed the floor for your wife, haven't you? Shines just like a mirror. Of course, it is a bit slippery. Almost lost your balance last night when you stepped on that little scatter rug over there and it skidded.

Of course you're careful about fire. Never use kerosene on a blaze or let the children play with matches—if you know it, that is. Better keep the matches where they can't get at them. Fire is a dangerous plaything.

Get plenty of rest, do you? Don't try to crowd yourself. Adequate rest and sleep will help you avoid accidents, by keeping your mind clear and your body alert.

How about taking a look around the place to see how many preventable hazards you can find. Make a list of them. Then do something about them.

The boys in Korea have no choice. They must face the hazards of war. But the people at home on the farms can do something about the hazards of carelessness.

Esther M. Colvin
Bureau of Agricultural Economics

Prices of Farm Products

[Estimates of average prices received by farmers at local farm markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and State]

Commodity	5-year average		June 15, 1950	May 15, 1951	June 15, 1951	Effective parity price June 15, 1951 [2]
	Base period price 1910–14 [1]	January 1935–December 1939				
Basic commodities:						
Cotton (pound)—cents	[3] 12.4	10.34	29.91	42.45	42.02	33.98
Wheat (bushel)—dollars	[3] .884	.837	1.93	2.11	2.08	2.42
Rice (cwt.)—do	1.97	1.65	4.19	5.74	5.51	5.58
Corn (bushel)—do	[3] .642	.691	1.36	1.64	1.62	1.76
Peanuts (pound)—cents	[3] 4.8	3.55	10.8	11.0	10.8	13.2
Designated non-basic commodities:						
Potatoes (bushel)—dollars	[4] 1.12	.717	1.27	1.09	1.08	[5] 1.82
Butterfat in cream (pound)—cents	27.2	29.1	59.7	69.5	69.8	77.0
Milk, wholesale (100 lb.)[6]—dollars	1.70	1.81	3.45	[7] 4.25	[8] 4.21	4.81
Wool (pound)—cents	20.1	23.8	57.6	106.0	101.0	56.9
Other non-basic commodities:						
Barley (bushel)—dollars	[3] .619	.533	1.12	1.28	1.22	[5] 1.53
Cottonseed (ton)—do	26.10	27.52	[9] 46.20	[9] 101.00	[9] 95.60	73.90
Flaxseed (bushel)—do	1.67	1.69	3.68	4.16	3.40	4.73
Oats (bushel)—do	[3] .399	.340	.804	.889	.829	[5] .981
Rye (bushel)—do	[3] .720	.554	1.21	1.61	1.60	[5] 1.77
Sorghum, grain (100 lb.)—do	[3] 1.21	1.17	1.93	2.22	2.16	[5] 2.99
Soybeans (bushel)—do	1.00	.954	2.80	3.13	2.98	2.83
Sweetpotatoes (bushel)—do	.908	.807	2.11	2.09	2.10	2.57
Beef cattle (100 lb.)—do	7.02	6.56	23.70	29.50	29.50	19.90
Chickens (pound)—cents	11.1	14.9	22.1	28.9	27.3	31.4
Eggs (dozen)—do	[3] 21.5	21.7	30.1	45.2	44.7	[5] 53.0
Hogs (100 lb.)—dollars	7.57	8.38	18.20	20.40	21.10	21.40
Lambs (100 lb.)—do	7.71	7.79	24.80	32.60	31.70	21.80
Veal calves (100 lb.)—do	7.84	7.80	25.90	33.20	33.40	22.20
Oranges, on tree (box)—do	[4] 2.29	1.11	1.85	1.92	1.53	[5] 3.71
Apples (bushel)—do	1.02	.90	2.62	1.84	1.89	2.89
Hay, baled (ton)—do	8.58	11.20	20.80	22.90	21.60	24.30

[1] Adjusted base period prices 1910–14, based on 120-month average January 1941–December 1950 unless otherwise noted.
[2] Parity prices are computed under the provisions of title III, subtitle A, section 301 (a) of the Agricultural Adjustment Act of 1938 as amended by the Agricultural Acts of 1948 and 1949.
[3] 60-month average, August 1909–July 1914.
[4] 10-season average 1919–28.
[5] Transitional parity, 90 percent of parity price computed under formula in use prior to Jan. 1, 1950.
[6] Prices received by farmers are estimates for the month.
[7] Revised.
[8] Preliminary.
[9] Relatively insignificant quantities sold for crushing this month.

Outlook Highlights

(*Continued from page 4*)

lowing the 1951 harvest, they are expected to advance later, as they have in other years in which loans have been available. The seasonal decline in average prices of wheat to a new-crop basis this year will be checked by the reduced early movement in winter wheat and by purchases for export.

Total wheat supplies for the marketing year beginning July 1 are estimated at 1,479 million bushels consisting of a crop of 1,054 million bushels (June 1 basis) and probable imports of feeding-quality wheat of about 50 million bushels, in addition to the carry-over. Supplies of this size have been exceeded in only 3 years. Estimated domestic disappearance will total about 778 million bushels. This would leave about 700 million bushels for exports, and carry-over.

World production prospects for the 1951 wheat and rye crops point to total production close to the high level of 1950; maybe slightly below.

Tobacco Outlook Favorable

An active demand for 1951 flue-cured tobacco is expected when marketings begin in the Georgia-Florida area in late July. Flue-cured acreage is 14 percent larger than last year and a larger crop is expected. Cigarette manufacture is likely to continue at a

(*Continued on page 16*)

Year and month	Industrial production (1935–39=100)[1]	Total income of industrial workers (1935–39=100)[2]	Average earnings of factory workers per worker (1910–14=100)	Wholesale prices of all commodities (1910–14=100)[3]	Index numbers of prices paid by farmers (1910–14=100)			Index numbers of prices received by farmers (1910–14=100)			
								Livestock and products			
					Commodities	Wage rates for hired farm labor[4]	Commodities, interest, taxes, and wage rates	Dairy products	Poultry and eggs	Meat animals	All livestock
1910–14 average	58	50	100	100	100	100	100	100	100	100	100
1915–19 average	72	90	152	158	149	147	148	147	153	162	157
1920–24 average	75	122	221	160	159	181	168	159	163	121	140
1925–29 average	98	129	232	143	151	184	161	161	155	145	152
1930–34 average	74	78	179	107	117	121	124	105	94	83	91
1935–39 average	100	100	199	118	124	121	125	119	108	117	115
1940–44 average	192	236	315	139	148	211	152	169	145	166	162
1945 average	203	292	389	154	179	359	189	230	194	207	210
1946 average	170	277	382	177	197	387	207	267	197	248	241
1947 average	187	330	436	222	230	419	239	272	219	329	287
1948 average	192	356	472	241	250	442	259	300	235	361	314
1949 average	176	328	478	226	240	430	250	251	219	311	272
1950 average	200	369	516	236	246	432	255	247	181	340	278
1950											
June	199	362	513	230	245	--------	[5] 254	227	156	342	268
July	196	366	516	238	247	425	256	232	173	371	287
August	209	392	526	243	248	--------	258	240	191	369	292
September	211	396	528	247	252	--------	260	248	196	372	298
October	216	405	540	247	253	428	261	261	201	358	296
November	215	406	542	251	255	--------	263	267	209	357	299
December	218	416	556	256	257	--------	265	272	249	360	311
1951											
January	221	416	556	263	262	450	272	286	203	391	323
February	221	419	556	268	267	--------	276	285	205	425	340
March	222	[5] 425	[5] 560	269	272	--------	280	280	217	428	343
April	223	426	557	268	273	479	283	273	215	428	340
May	223	--------	--------	267	272	--------	[5] 283	270	221	418	335
June	--------	--------	--------	--------	272	--------	283	269	217	422	335

Year and month	Index numbers of prices received by farmers (1910–14=100)									Parity ratios[6]
	Crops								All crops and livestock	
	Food grains	Feed grains and hay	Tobacco	Cotton	Oil-bearing crops	Fruit	Truck crops	All crops		
1910–14 average	100	100	100	100	100	100	--------	100	100	100
1915–19 average	193	161	183	175	201	126	--------	171	164	111
1920–24 average	147	125	189	197	155	157	[7] 152	162	150	89
1925–29 average	141	118	169	150	135	146	145	143	148	92
1930–34 average	70	76	117	77	78	98	104	84	88	71
1935–39 average	94	95	172	87	113	95	95	99	107	86
1940–44 average	123	119	241	138	170	150	164	145	154	101
1945 average	172	161	360	178	228	244	207	203	206	109
1946 average	201	196	376	237	260	250	182	227	234	113
1947 average	270	249	374	272	363	212	226	263	275	115
1948 average	250	250	380	270	351	174	214	252	285	110
1949 average	219	170	398	245	242	199	201	223	249	100
1950 average	224	187	402	280	276	200	185	232	256	100
1950										
June	218	190	388	251	254	207	182	225	247	97
July	226	195	387	278	267	211	200	236	263	103
August	224	193	399	311	293	200	164	239	267	103
September	221	194	428	336	303	217	126	243	272	105
October	219	188	426	327	300	207	138	238	268	103
November	224	192	428	346	351	194	188	250	276	105
December	233	202	436	339	366	202	211	258	286	108
1951										
January	240	214	442	347	374	192	324	275	300	101
February	254	222	440	351	379	204	333	283	313	131
March	245	221	437	359	386	202	265	276	311	111
April	247	222	438	363	385	209	225	275	309	109
May	244	223	438	357	380	194	239	271	305	108
June	240	217	438	353	358	200	189	263	301	106

[1] Federal Reserve Board: represents output of mining and manufacturing; monthly data adjusted for seasonal variation.

[2] Computed from data furnished by Bureau of Labor Statistics and Interstate Commerce Commission on pay rolls in mining, manufacturing, and transportation; monthly data adjusted for seasonal variation. Revised January 1950. [3] Bureau of Labor Statistics.

[4] Farm wage rates simple averages of quarterly data, seasonally adjusted. [5] Revised.

[6] Ratio of index of prices received to index of prices paid, interest, taxes, and wage rates. This parity ratio will not necessarily be identical to a weighted average percent of parity for all farm products, largely because parity prices for some products are on a transitional basis. [7] 1924 only.

Outlook Highlights

(*Continued from page 14*)

record level. Cigarette production for fiscal year ended June 30 is estimated at 410 billion—7 percent above the previous year.

Potato Situation Fair

Prices received by farmers for potatoes in July and August may average above the very low price of a year earlier. Although there is no price support program for potatoes this year, acreage in the Intermediate States is down considerably from last year. Indicated early commercial production for summer harvest is down more than 6 million bushels, or more than a fourth from last year. Also, in contrast to last year, the intermediate crop this year will be coming onto a market not already flooded with late spring potatoes.

Total Personal Income Up

Total personal income in April was at an annual rate (seasonally adjusted) of 244 billion dollars, up from a year earlier by 30.6 billion dollars.

Installment Debts Down

Installment debts of consumers declined 69 million dollars in April. Last year in the same month they rose 245 million. For the 6-month period, October 1950 to April 1951, these debts declined almost 500 million dollars.

Wholesale Prices Up 15 Percent

Wholesale prices averaged over 15 percent higher in early June than a year ago. Largest gains were in textiles, chemicals, farm products, and foods.

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